What is claimed is:

1. A high frequency piezoelectric resonator, the piezoelectric resonator including a piezoelectric plate having disposed on its main surfaces, respectively, mutually opposing main electrodes for the excitation, a pair of second electrodes being each disposed surrounding the peripheral edge of its corresponding main electrode with a gap in between, wherein:

the material of the main electrode and the material of the second electrode are different from each other.

2. A high frequency piezoelectric resonator according to claim 1, wherein the density of the material of the second electrode is made lower than that of the main electrode; and relevant values of the main electrode, second electrode, and gap are set so that an anti-symmetric 0th mode does not become an trapped mode.

3. A high frequency piezoelectric resonator according to claim 1 or 2, wherein the piezoelectric plate is made a piezoelectric plate having formed therein a recess.

4. A high frequency piezoelectric resonator according to claims 1 to 3, wherein the configuration of the main electrode is made elliptic.

5. A high frequency piezoelectric resonator including a

piezoelectric plate, one main surface of the piezoelectric plate being recessed to thereby form a thin portion therein, the main surface opposing the recess corresponding to the thin portion having formed thereon at its central portion a convex portion, the convex portion having formed thereon a main electrode for the excitation, a lead electrode being extended from the main electrode toward an edge of the plate, a second electrode being so provided as to surround the main electrode and the lead electrode with a gap in between, the piezoelectric plate having applied on a recess side thereof an entire electrode.

6. A high frequency piezoelectric resonator according to claim 5, wherein the convex portion is made elliptic.

7. A high frequency piezoelectric resonator according to claims 1 to 6, wherein the second electrode is divided into a plurality of portions; and adjustment of frequency is performed of these electrode portions.